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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,381	08/27/2003	Takaki Tsutsui	02410340AA	5364

30743 7590 06/03/2004

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RESTON, VA 20190

EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)	
	10/648,381	TSUTSUI ET AL.	
	Examin r	Art Unit	
	William H. Mayo III	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on April 9, 2004. These drawings are not approved because the Figure 2 lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the ferrite material is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 6-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manly (Pat Num 4,371,742) in view of McFadden et al (Pub Num 2004/0020674). Manly discloses an EMI suppressing cable (Figs 1-3) having excellent EMI absorption characteristics (Col 2, lines 15-20). Specifically, with respect to claim 1, Manly discloses a cable (Fig 1) comprising a insulated signal wire (12 & 14), a shielding layer (16) formed on the outer surface of the insulated signal wire (12 & 14) and a magnetic material layer (18) formed on an outer surface of the shielding layer (16) and having a ferrite resin layer (i.e. iron powder mixed with polyurethane binder, Col 5, lines 45-50) and a film (i.e. polyester, Col 5, lines 58-62), wherein the magnetic material (18) may be wounded on the shielding layer (16, Col 6, lines 66-68). With respect to claim 2, Manly discloses that the magnetic material (18), which is spirally wound (i.e. helically wounded) around an axis of the insulated signal wire (12 & 14, Col 6, lines 66-68). With respect to claim 3, Manly discloses that the magnetic material (18), which is wound (i.e. helically wounded) around an axis of the insulated signal wire (12 & 14, Col 7, lines 21-25). With respect to claim 6, Manly discloses that the magnetic material layer (18) is a tape layer (i.e. the layer is 0.009 inches, Col 5, lines 58-62). With respect to claim 7, Manly discloses that the magnetic material layer (18) may have a single sheet shape (Fig 5). With respect to claim 8, Manly discloses a cable (Fig 1) comprising a insulated

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signal wire (12 & 14), and a magnetic material layer (18) formed on an outer surface of the shielding layer (16) and having a ferrite resin layer (i.e. iron powder mixed with polyurethane binder, Col 5, lines 45-50) and a film (i.e. polyester, Col 5, lines 58-62), wherein the magnetic material (18) may be wound on the shielding layer of the coaxial cable (16, Col 6, lines 66-68). With respect to claim 9, Manly discloses that the magnetic material (18), which is spirally wound (i.e. helically wound) around an axis of the insulated signal wire (12 & 14, Col 6, lines 66-68). With respect to claim 10, Manly discloses that the magnetic material (18), which is wound (i.e. helically wound) around an axis of the insulated signal wire (12 & 14, Col 7, lines 21-25). With respect to claim 12, Manly discloses that the magnetic material layer (18) is a tape layer (i.e. the layer is 0.009 inches, Col 5, lines 58-62). With respect to claim 13, Manly discloses that the magnetic material layer (18) may have a single sheet shape (Fig 5).

However, Manly doesn't necessarily disclose the ferrite layer being printed on one face of the film (claim 1), nor the magnetic material having a ferrite resin layer formed on one face of the film to form a two-layer structure (claim 8).

McFadden teaches an EMI suppressing shield (Figs 1-10) that incorporates both reflective and absorptive properties to improve shielding effectiveness over a range of frequencies (paragraph 13), that may be utilized on elongated elements, such as a cable (Figs 5a-5e, paragraph 48). Specifically, with respect to claims 1 & 8, McFadden teaches an EMI suppressing shield (Fig 1a) that comprises magnetic material having a film layer (100) and a ferrite layer (105), wherein the ferrite layer (105) may be printed

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onto the film layer (100, Page 2, paragraph 15), thereby forming a two layer structure (Fig 1a).

With respect to claims 1 & 8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the magnetic material of Manly to comprise the magnetic material configuration as taught by McFadden because McFadden teaches that such a configuration incorporates both reflective and absorptive properties to improve shielding effectiveness over a range of frequencies (paragraph 13) and may be utilized on elongated elements, such as a cables (Figs 5a-5e, paragraph 48).

6. Claims 4 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manly (Pat Num 4,371,742) in view of McFadden et al (Pub Num 2004/0020674, herein referred to as modified Manly), as applied to claims 1 & 8, further in view of Ikeda et al (JP Pat Num 11-185542, herein referred to as Ikeda). Manly discloses an EMI suppressing cable (Figs 1-3) having excellent EMI absorption characteristics (Col 2, lines 15-20), as disclosed above with reference to claim 1 above.

However, modified Manly doesn't necessarily disclose the film being a metallic film (claims 4 & 11).

Ikeda teaches a EMI suppressing cable having a high shielding effect over a wide range, that is easy the handle, and can keep a fine view without the needing to increase the diameter of the cable so much, by shielding radiation noise (see solution). Specifically, Ikeda teaches a cable (Fig 1) comprising a thin layer of magnetic permeability material (6, i.e. ferrite resin material), which is laminated to a metallic foil

layer (5) for the purpose of providing a high shielding effect wherein the magnetic permeability material absorbs the radiation noise (see solution).

With respect to claim 4, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the magnetic resin layer of modified Manly to comprise the magnetic resin layer configuration as taught by Ikeda because Ikeda teaches that such a configuration provides a cable having a high shielding effect over a wide range, that is easy to handle, and can keep a fine view without the need to increase the diameter of the cable so much, by shielding radiation noise (see solution).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Communication***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

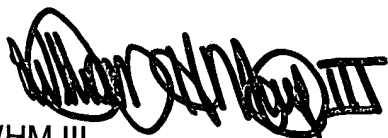
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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A handwritten signature in black ink, appearing to read "William H. Mayo III", written in a cursive, stylized script.

WHM III  
May 28, 2004

William H. Mayo III  
Primary Examiner  
Art Unit 2831